

# WHAT *it will* TAKE:

Investing in Wisconsin's future  
by keeping kids safe today

## Prevention Investment Brief

### Child Maltreatment Prevention Programs – A Worthwhile Investment

Child maltreatment takes a heavy toll on the lives of its young victims and can contribute to negative long-term health and well-being. It is not only a critical public health issue, it also has a significant cost to taxpayers. The Centers for Disease Control and Prevention (CDC) recognizes the economic burden associated with child maltreatment. In fact, the lifetime cost for each victim of child maltreatment is comparable to other serious health conditions, such as stroke and Type 2 diabetes (Fang, Brown, Florence, & Mercy, 2012). Clearly, with more than 5,000 substantiated cases in Wisconsin during 2012 (Wisconsin Department of Children and Families, 2013) child maltreatment needs to be addressed with as much tenacity as other significant public health issues.

There are a number of protective factors, including the presence of caring adults that can often mitigate the consequences of childhood adversity. Additionally, like other health conditions, effective strategies exist to prevent child maltreatment. Research indicates investing in prevention programming has positive results for children and families.

**The communities where families live  
and local investment in maltreatment  
prevention matters.**

This brief builds on the series of reports titled "What it Will Take: Investing in Wisconsin's Future by Keeping Kids Safe Today," which was released in partnership with the Wisconsin Council on Children and Families in 2010 (Maguire-Jack & O'Connor, 2010). This policy brief and analysis were conducted to further understand whether spending on child maltreatment prevention is making a difference in Wisconsin

counties. These findings conclude that higher child maltreatment prevention spending is linked to reduced child maltreatment risk and underscore the importance of local investment in child maltreatment prevention, as well as the relevance of the community context for child maltreatment risk.

To gain perspective on the impact a community or county plays in child maltreatment prevention, this study used a unique data set that combines information on county-level prevention spending with survey information on families living in 20 different Wisconsin counties. Utilizing this methodology, researchers determined that the dollar amount spent on child maltreatment prevention within a county is associated with reduced rates of child maltreatment behaviors within families in that county.<sup>1</sup> This study is considered rare in its ability to distinguish "family-level" from "county-level" risk and protective factors. Of approximately thirty other existing studies on communities and child maltreatment, only five used an analysis strategy to separate out the individual contributions of characteristics at the family and community levels.<sup>2</sup> The use of such strategies is critical for conducting community context studies because it affords an understanding of the role that a community (or county) can play in preventing maltreatment. For more information on the analytical strategy, see the box titled "Hierarchical Linear Models."

1. County-level child maltreatment prevention dollars include federal, state, county, and private dollars earmarked for prevention activities at the local level.
2. The term "community" is not equivalent with "county," but this analysis focused on the role of county-level resources, making it the appropriate geographic choice in this case.

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The five studies identified in the literature as rigorous efforts to understand maltreatment contexts beyond the family found that neighborhood impoverishment was associated with child abuse and neglect, and found conflicting information about the role of childcare burden (relates to the number of children relative to the number of adults available to care for them), residential instability (relates to residents moving in and out of communities), and ethnic heterogeneity (relates to the percent of the population of different races and ethnicities) (Coulton, et al., 1999; Irwin, 2009; Kim, 2004; Merritt, 2009; Molnar, et al., 2003). To date, no studies have paid attention to the role of the prevention program service array available to families at a local level. This study sought to fill in the missing piece.

The availability of prevention programs varies widely from one community to the next. The “What it Will Take” series found that the number of prevention programs varied from 1 to more than 10 across Wisconsin counties, and prevention spending per (child) capita ranged from nearly \$0 to \$100 (Maguire-Jack & O’Connor, 2010). These findings suggest that there may be considerable variation in access to prevention services across localities. To the extent that programs designed to prevent child maltreatment are effective, understanding the county-level spending and availability of prevention programs within communities is essential for understanding community effects on maltreatment.

### Box 1: Hierarchical Linear Models

An important development over the past several years in the field of contextual research is the use of hierarchical linear modeling (HLM), which can aid in examining the relationship between contextual factors and child maltreatment. Through HLM, one can parse the variance in family-level child maltreatment that is explained by predictors at the community level. For example, researchers can use HLM techniques to understand the extent to which individual-level characteristics (e.g., family poverty, substance abuse, parenting knowledge) versus group-level characteristics (e.g., neighborhood poverty, availability of prevention services) explain a family’s likelihood of engaging in maltreatment.

## STUDY DESCRIPTION AND RESULTS

The data for this analysis were derived from five sources: the 2010 U.S. Census; the American Community Survey 2006-2010; a Wisconsin-based project called the “prevention scan,” which provided the county-level data; administrative records on official reports of child maltreatment; and the Family Support Study, a project conducted by the University of Wisconsin – Madison School of Social Work. The first three sources provide the county level data; the latter two provide the family-level data.

The Family Support Study sample was compromised of 1,014 families receiving Wisconsin, Infant and Children (WIC) benefits in 20 counties across Wisconsin. Maltreatment was defined in this study as having at least one investigated Child Protective Services (CPS) report over an 18-month period following the completion of the survey. The main predictor of interest is prevention spending, which was available from the prevention scan. The sources of funding of these programs range from federal sources such as Promoting Safe and Stable Families and Title IV-E Incentive funds, state sources such as Brighter Futures Initiative, or funding through the Wisconsin Children’s Trust Fund, county tax levy, and private foundations. This variable was logged due to a skewed distribution. For more information on the individual data sources, see the box titled “Data Sources.” Table 1 shows the odds ratios associated with each of the variables. Statistically meaningful (denoted with an asterisk), numbers less than 1

signify that the variable is associated with lower odds of maltreatment, while numbers greater than 1 signify that the variable is associated with a higher odds of maltreatment. In the first model, which includes only the county demographic factors, no variables are meaningfully associated with child maltreatment. The second model adds family-level variables, and shows that being a single parent and having a greater number of children living in the household are both associated with higher odds of maltreatment. In the third and final model, the key independent variable of interest, spending on maltreatment prevention programs, is added. Results reveal that greater spending on maltreatment prevention programs is associated with a decrease in the odds of maltreatment.

**With every 10-fold increase in county prevention spending, an individual family’s odds of maltreatment declines by 51%.**

Specifically, with every 10-fold increase (due to the variable being logged) in prevention spending at the county level, the odds of maltreatment for an individual family declines by 51%. This finding is statistically meaningful above and beyond any associations between maltreatment and family-level or other county-level variables, suggesting that maltreatment prevention spending plays a substantial role in reducing maltreatment.

**Table 1. Hierarchical Linear Model Results** (N=1,014 individuals in 20 counties)

	Model 1: County Effects	Model 2: County and Individual Effects	Model 3: Full Model: With Prevention Spending
County	Odds Ratio	Odds Ratio	Odds Ratio
Childcare Burden	.77	.79	.78
Socioeconomic Disadvantage	1.12	1.10	1.18
Residential Instability	1.00	1.04	1.17
Prevention Spending			.49*
Family			
Single Parent		2.07*	2.09*
# Children		1.22*	1.23*
Moved >1		1.62	1.67
Parenting Stress		1.27	1.26
Material Hardship		1.08	1.08
Social Hardship		.86	.86

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### Box 2: Data Sources

U.S. Census and American Community Survey data. A variety of measures on county demographic characteristics were taken from the 2010 U.S. Census and American Community Survey 2006-2010. These characteristics include information about county population size, poverty rates, family structures, racial and ethnic composition of the population, and housing characteristics.

**Prevention Scan.** Between September 2008 and March 2010, information was collected on universal and selective child maltreatment prevention programs in Wisconsin counties. Universal prevention programs are those that are aimed at an entire population, regardless of risk for maltreatment, while selective prevention programs are targeted to people who are thought to be at a higher risk for maltreatment due to individual, family, or community factors (Self-Brown & Whitaker, 2008). Several sources of information were used for the scan including state reports on prevention programs, a survey that was emailed to all identified providers of prevention programs, and follow-up discussions with county human services directors. Please see the report “What it Will Take: Investing in Wisconsin’s Future by Keeping Kids Safe Today” available at <http://wischildrenstrustfund.org/index.php?section=stats-and-reports> for a full description of the prevention scan.

**Administrative Data.** Information on child maltreatment investigations was obtained from official child welfare data contained in the electronic Wisconsin Statewide Automated Child Welfare Information System (eWiSACWIS). These data were made available through a data sharing agreement between the University of Wisconsin-Madison Institute for Research on Poverty and the Wisconsin Department of Children and Families.

**Family Support Study.** In the fall of 2010, Dr. Kristen Slack and Dr. Lawrence Berger of the University of Wisconsin – Madison collected survey data from 1,086 Wisconsin families who were receiving Women, Infants, and Children (WIC) benefits in 26 of Wisconsin’s 72 counties. Surveys were mailed to local WIC offices, and WIC recipients who were approved for benefits or who came into WIC offices for redetermination of benefits were offered the survey packet (provided in English and Spanish). WIC recipients then voluntarily completed the survey and returned it to the research team. The survey consisted of 168 questions on parenting behaviors, social support, domestic violence, economic support, and mood, as well as a host of demographic characteristics. 2,092 surveys were distributed and a total of 1,086 were returned, for a return ratio of approximately 50%. The analyses were conducted on a final sample size of 1,014 families from 20 counties. Seventy-two families from six counties were dropped from the sample because there were too few families residing in these counties for analysis requirements.

## CONTRIBUTIONS AND LIMITATIONS OF THE CURRENT STUDY

Through this study, researchers sought to understand whether higher child maltreatment prevention spending in Wisconsin counties was associated with corresponding declines in child maltreatment. Using a specialized analytical approach and a unique dataset combining county- and family-level information, researchers found that the availability of prevention programs (measured as prevention spending) played a role in reducing child maltreatment, above and beyond other county and family-level factors.

Although the initial “What it Will Take” study found that there is an overall low use of evidence-based maltreatment prevention programs, the findings reported here still show an association between maltreatment prevention spending and family-level risk for child maltreatment. Families that live in counties with greater spending on prevention services are at lower risk for maltreating their children compared to families in counties that spend less, regardless of whether that spending supported evidence-based programs. Further work to ensure that the prevention programs delivered in Wisconsin counties represent the most effective service models is a necessary next step to improving Wisconsin's continued efforts to reduce abuse and neglect.

There are several noteworthy limitations that must be considered regarding the current study. First, the Family Support Study was limited to families receiving WIC benefits, thus representing an economically disadvantaged segment of the population of families with younger children. Second, the current study was conducted at the county level, because of the way in which prevention programs are funded. However, there is a great deal of variability within counties, from one neighborhood to the next. As a result, the current study may not accurately capture all of the variation in access to prevention programs that occurs at the neighborhood level. Third, despite significant efforts to obtain accurate information from counties on their maltreatment prevention programs, there may be missing information on prevention programs that the researchers were not able to identify.

## IMPLICATIONS AND RECOMMENDATIONS

Despite these limitations, the current study has important implications for policy and future research. Specifically, this analysis reinforces the recommendation made in the original report “What it Will Take”; that Wisconsin should invest more resources in evidence-based prevention programs and innovative and promising practices in maltreatment prevention should be encouraged and supported.

In terms of future research, it is essential to gain further insight about the way in which maltreatment prevention programs available locally are associated with maltreatment rates. Specifically, understanding the types of programs and services that are most successful in reducing maltreatment, whether the

quality of such programs plays a role, and what services are available in each county, is essential. The current study was unable to disentangle these research questions because of the lack of variation in types of services and an overall low reliance on evidence-based programs across the state of Wisconsin. Spending on maltreatment prevention programs was used as a proxy for the availability of prevention services; however, a more thorough understanding about the role of the type and quality of services is essential for tailoring specific interventions to communities.

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### Box 3: Wisconsin Children's Trust Fund

Wisconsin Children's Trust Fund (CTF), was created by statute in 1983 to promote child abuse and neglect prevention efforts statewide. As the state's leading child maltreatment agency, CTF is committed to using leading research to influence policy, practice and funding decisions to ensure that all children grow up in safe, stable, nurturing relationship and environments. In local communities and statewide, CTF advances a comprehensive child maltreatment prevention frame by connection key partners around a shared agenda, seeding innovative strategies and research, spreading proven programs, impacting public perception, and promoting sound public policy. CTF is a leading force in building genuine cross-sector partnerships to transform the brightest ideas into concrete actions to make Wisconsin the best place for children and families. The organization is governed by a 20-member board composed of the Governor, Attorney General, State Superintendent, Secretaries from the Departments of Children and Families, Health Services, and Corrections, four legislators, including two members each from the Assembly and Senate appointed by the majority and minority leaders, and ten public members appointed by the Governor.

### CONCLUSION

This research suggests that maltreatment prevention efforts in Wisconsin are successful in reducing maltreatment behaviors. As counties invest more resources in maltreatment prevention, families have lower risk of maltreating their children. Specifically, for every 10-fold increase in local maltreatment prevention program spending, a family's individual risk of maltreatment decreased by 51%. By continuing to improve the services available and investing additional resources in prevention efforts, Wisconsin has the opportunity to ensure that all children grow up in safe, stable, nurturing relationships and environments.

### References

- Coulton, C., Korbin, J., & Su, M. (1999). *Neighborhoods and child maltreatment: a multi-level study*. [doi: DOI: 10.1016/S0145-2134(99)00076-9]. *Child Abuse & Neglect*, 23(11), 1019-1040.
- Fang X., Brown D.S., Florence C., & Mercy J. (2012). *The economic burden of child maltreatment in the United States and implications for prevention*. *Child Abuse and Neglect*, 36, 156– 165.
- Irwin, M. (2009). *The impact of race and neighborhood on child maltreatment: a multi-level discrete time hazard analysis*. Unpublished Dissertation, Case Western Reserve University, Cleveland, OH.
- Kim, J. S. (2004). *Neighborhood effects on the etiology of child maltreatment: a multi-level study* Unpublished Dissertation, University of Texas at Austin, Austin, TX.
- Maguire-Jack, K., & O'Connor, C. (2010). *Child maltreatment prevention: Where we stand and directions for the future*. *What it Will Take: Investing in Wisconsin's future for keeping kids safe today*. Madison, WI: Wisconsin Children's Trust Fund and Wisconsin Council on Children and Families.
- Merritt, D. H. (2009). *Child abuse potential: Correlates with child maltreatment rates and structural measures of neighborhoods*. *Children and Youth Services Review*, 31(8), 927-934.
- Molnar, B. E., Buka, S. L., Brennan, R. T., Holton, J. K., & Earls, F. (2003). *A Multilevel Study of Neighborhoods and Parent-to-Child Physical Aggression: Results From the Project on Human Development in Chicago Neighborhoods*. *Child Maltreat*, 8(2), 84-97.
- Self-Brown, S., & Whitaker, D. J. (2008). *Parent-focused child maltreatment prevention: Improving assessment, intervention, and dissemination with technology*. *Child Maltreatment*, 13, 400-416.
- Wisconsin Department of Children and Families. (2013). *Wisconsin Child Abuse and Neglect Report: Annual Report for Calendar Year 2012 to the Governor and Legislature*: <http://dcf.wi.gov/cwreview/reports/CAN/2012CANReport.pdf>

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